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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,136

01/18/2006

Masanori Hirano

2271/75741

8105

23432 7590 12/24/2008  
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EXAMINER

NGUYEN, THINH H

ART UNIT

PAPER NUMBER

2861

MAIL DATE

DELIVERY MODE

12/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,136	<b>Applicant(s)</b> HIRANO ET AL.	
	<b>Examiner</b> Thinh H. Nguyen	<b>Art Unit</b> 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.  
4a) Of the above claim(s) 23-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11-14, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 5-10 and 15-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/18, 7/19, 10/26/06; 1/22, 2/19, 6/6/08</u> . | 6) <input type="checkbox"/> Other: ____.  |



## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1-22 (group I) filed September 23, 2008 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 11, 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Askeland et al. (U.S. Patent 6,54,217)

Re claims 1, 11, 21, Askeland (col.5, lines 6-39; col.6, lines 20-67) discloses the instant claimed image reproducing and forming apparatus comprising:

a recording head (21) configured to eject liquid droplets of at least one color and capable of bidirectional recording; and

a controller (58) configured to control an amount of liquid adhering to a recording paper so as to reduce color difference occurring in the bidirectional recording.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4, 12-14, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Askeland et al. in view of Shimizu. (U.S. Patent 6,669,319)

Askeland discloses elements of the instant claimed subject matter as noted above with the exception of the controller has a determination unit that determines whether an object to be output is text, and wherein the controller does not perform a process of reducing the color difference when the object to be output is text.

wherein the controller has a determination unit that determines an object to be output and the number of colors used in the bidirectional recording, and wherein the controller does not perform a process of reducing the color difference when the object to be output is not text and when the number of colors is one; and

wherein the controller controls the amount of liquid adhesion through controlled gamma correction using a controlled gamma value adjusted so as to reduce the color difference.

Re claims 4, 14, 22, Shimizu (col.13, lines 23-30) suggests controlling the gamma correction value to adjust the hue change. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to correct the amount/density of ink using gamma correction as suggested by Shimizu in the system of Askeland for minimizing the effect of hue change in the bidirectional printer.

Re claims 2-3, 12-13, It is well perceived that determination which text, picture or photograph being outputted to the printer controller is within the printer capacity. Also, it

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is the common sense and knowledge that in text mode printing, and a single color mode, the quality is not as high requirement and thus there is no need to perform a process of reducing the color difference so as to reduce the hue difference.

***Allowable Subject Matter***

6. Claims 5-10, 15-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Patent Application Information Retrieval (PAIR)***

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Contact Information**

8. Any inquiry concerning this communication should be directed to examiner Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be reached Mon-Fri from 8:30A – 5:00P. The official fax phone number for the organization is (571) 273-8300. The examiner supervisor, Matthew Luu, can also be reached at (571) 272-7663.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.

/Thinh H Nguyen/

Primary Examiner, Art Unit 2861  
December 21, 2008

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